

AMENDMENTS UNDER 37 C.F.R. § 1.111  
U.S. Appln. No.: 09/995,731  
Attorney Docket No.: Q66697

### **REMARKS**

In the present Amendment, claim 87 has been amended to incorporate the subject matter of claim 88. Claim 88 has been canceled, accordingly.

Claim 89 has been amended to recite --A method of subjecting a mammal to triple action of an AGE-breaker, AGE-inhibitor and a free radical scavenger--. This amendment is supported by the specification, for example, at pages 29-45 and pages 44-45.

### **Interview Summary**

During a telephonic interview of Applicant's representatives and Examiner Binta Robinson on February 20, 2004, claims 1-14, 16-29, 31-34, 36-39, 41-44, 46-63, 65-69, 71-75 and 77-90 were discussed. No prior art was discussed. The issues discussed are described in detail later in this Amendment.

In view of the clear errors contained in the outstanding Office Action as discussed below, and that the Examiner did not examine all of the claims which should have been examined. During the Interview of February 20, 2004, the Examiner agreed that the next Office Action will not be designated as "Final."

AMENDMENTS UNDER 37 C.F.R. § 1.111

U.S. Appl. No.: 09/995,731

Attorney Docket No.: Q66697

### **Status of Claims**

During the interview of February 20, 2004, the Examiner agreed that in addition to claims 1, 2, 4, 5, 7, 8, 10, 11, 16-26, 31, 36, 41, 46-50, 53, 54, 57, 59, 60, 65, 66, 71, 72 and 77-90, claims 3, 6, 9, 12-14, 27-29, 32-34, 37-39, 42-44, 51, 52, 55-56, 58, 61-63, 67-69 and 73-75 also read on the elected species.

Therefore, claims 1-14, 16-29, 31-34, 36-39, 41-44, 46-63, 65-69, 71-75 and 77-90 are pending, and all of these claims should be examined.

### **Restriction Requirement**

As indicated in the Amendment of September 25, 2003, Applicants believe that the genus defined by the Examiner is “the composition of formula I in claim 1 where  $R_1$  is  $N(R_7)N(R_7)R_9$ ,  $R_9$  is H, alkyl,  $SO_2R_{10}$ , and  $R_{10}$  everything claimed except heteroaryl moieties,  $R_7$  is everything claimed except heteroaryl moieties,  $R_3$  is thienyl, X is everything claimed,  $R_2$  is everything claimed except heteroaryl rings.” The outstanding Office Action is silent in this regard.

Applicants respectfully traverse the genus defined by the Examiner in that it is unreasonably restrictive. With this restriction, the formula (I) covers only ten specific compounds (Compound Nos. 5, 45, 50, 53, 55, 57, 63, 64, 67 and 68) out of ninety-nine compounds disclosed in the specification and listed in Tables 1A and 1B. This places an unfair

AMENDMENTS UNDER 37 C.F.R. § 1.111

U.S. Appln. No.: 09/995,731

Attorney Docket No.: Q66697

burden on Applicants who will have to file many further applications. On the other hand, it would not require a lot of work on the part of the Examiner to expand the search.

For the Examiner's further convenience, Applicants have amended the claims to further define the "heteroaryl" as heteroatoms selected from the group consisting of O, N and S, wherein the hetroaryl may be substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, C<sub>1</sub>-C<sub>6</sub> straight chain or branched alkyl group, and nitro group. This amendment is supported by the specification, for example, on page 12, 1st full paragraph.

In view of the above, the Examiner is respectfully requested to reconsider and withdraw the Restriction Requirement.

**Claim Rejection Under 35 U.S.C. §112, First Paragraph**

On page 2 of the Office Action, claims 1, 2, 4, 5, 7, 8, 10, 11, 16-25, 26, 31, 41, 46, 47-50, 53, 54, 56, 57, 59, 60, 65, 71, 72, and 77-90 are rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking enablement.

For the following reasons, Applicants respectfully submit that the present claims are fully in compliance with the §112 requirements.

(1) R<sub>2</sub>, R<sub>9</sub> and R<sub>10</sub> equaling all "heterocyclic" groups

During the interview of February 20, 2004, the Examiner admitted there is an error and she meant "heteroaryl" groups.

AMENDMENTS UNDER 37 C.F.R. § 1.111

U.S. Appln. No.: 09/995,731

Attorney Docket No.: Q66697

As set forth on from page 60 to page 72 of the Amendment of January 3, 2003, and again on page 65 of the Amendment of September 25, 2003, Applicant has provided detailed synthetic examples to show how one of ordinary skill in the art will be able to introduce heteroaryl substituents at different positions in the presently claimed compounds. The Examiner does not provide any explanation as to why one of ordinary skill in the art would not be enabled to do so.

Furthermore, Applicant has in the Amendment of September 25, 2003, amended claims 1, 50, 65, 71, 83 and 89 to further define "heteroaryl group," by reciting --wherein the heteroaryl as defined for R<sub>3</sub> and R<sub>10</sub> has heteroatoms selected from the group consisting of O, N and S, wherein the hetroaryl may be substituted with one or more substituents selected from the group consisting of F, Cl, Br, I, C<sub>1</sub>-C<sub>6</sub> straight chain or branched alkyl group, and nitro group--.

Accordingly, the present claims do not include all heteroaryl groups, as asserted by the Examiner.

(2) all of the agents claimed in claim 48

As described at page 81 of the present specification, line 25 to page 86, a cosmetic composition comprises the compound of Formula (I) in a vehicle or carrier, which can have additional agents including all of the agents recited in claim 48, according to conventional practice. Specific examples for the agents and the compositions are also provided. Accordingly, the specification enables one of ordinary skill in the art to make or use the present invention.

AMENDMENTS UNDER 37 C.F.R. § 1.111

U.S. Appln. No.: 09/995,731

Attorney Docket No.: Q66697

The Examiner does not provide any explanation why one of ordinary skill in the art would not be enabled in light of the description in the present specification.

(3) a method of treating all diseases claimed in claim 82, as well as all diseases caused by accumulation of free radicals as claimed in claim 71

During the Interview of February 20, 2004, the Examiner admitted there is a mistake and the rejection should be withdrawn, because in the Amendment of September 25, 2003, claim 82 has been cancelled and claim 71 does not recite all diseases caused by accumulation of free radicals, but only those specified. Those specified were approved during the Interview of June 6, 2003.

(4) a method of inhibiting all diseases caused by the onset of AGE as claimed in claim 87

Applicant has in the Amendment, amended claim 87 to incorporate the subject matter of claim 88, which is not included in the rejection.

(5) a method of treating all conditions requiring simultaneous action of an AGE-breaker, AGE-information inhibitor and a free radical scavenger as claimed in claim 89

Applicant has in the Amendment, amended claim 89 to recite --A method of subjecting a mammal to triple action of an AGE-breaker, AGE-inhibitor and a free radical scavenger--. As described in "Discussion of the Test Results" on page 44-55 of the specification, for cosmetic application, it is important to have an active ingredient that can act as AGE breaker and AGE formation inhibitor, and can quench free radical from body cells at the same time.

AMENDMENTS UNDER 37 C.F.R. § 1.111  
U.S. Appln. No.: 09/995,731  
Attorney Docket No.: Q66697

(6) a method for inhibiting the formation of AGE in claim 83-84

As indicated on page 67 of the Amendment of September 25, 2003, during the Interview of June 6, 2003, the Examiner (and her supervisor Mr. Alan Rotman) agreed that the phrase “inhibiting AGE formation” is permissible.

During the Interview of February 20, 2004, the Examiner agreed to check with her new supervisor to see whether the phrase may be permissible.

(7) a method for preventing diseases claimed in claims 16 and 24

During the Interview of February 20, 2004, the Examiner admitted there is a mistake because present claims 16 and 24 do not recite the term “preventing,” and the rejection should be withdrawn.

In view of the above, the Examiner is respectfully requested to reconsider and withdrawn the rejection.

**Claim Rejection Under 35 U.S.C. §112, Second Paragraph**

At page 5 of the Office Action, claim 89 is rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite.

Applicants respectfully submit that amended claim 89 is not indefinite. As indicated above, Applicants have in the Amendment, amended claim 89 to recite --A method of subjecting

AMENDMENTS UNDER 37 C.F.R. § 1.111  
U.S. Appln. No.: 09/995,731  
Attorney Docket No.: Q66697

a mammal to triple action of an AGE-breaker, AGE-inhibitor and a free radical scavenger--.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



---

Fang Liu  
Registration No. 51,283

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: April 28, 2004